

---

# **California Board of Registered Nursing**

## **2007-2008 Annual School Report**

---

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

**Southern California II**  
Orange, Riverside and San Bernardino Counties

March 23, 2009

Prepared by:  
Renaë Waneka, MPH  
Joanne Spetz, PhD  
Center for the Health Professions  
University of California, San Francisco  
3333 California Street, Suite 410  
San Francisco, CA 94118



## INTRODUCTION

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to conduct a historical analysis of data collected from the 2000-2001 survey through the 2007-2008 survey. In this report, we present eight years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions<sup>1</sup> in California, with a separate report for each region. All reports are available on the BRN website (<http://www.rn.ca.gov/>).

This report presents data from the 3-county Southern California II region. Counties in the region include Orange, Riverside and San Bernardino. All data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs. Additional data from the past eight years of the BRN Annual School Survey are available in an interactive database on the BRN website.

---

<sup>1</sup> The nine regions include: (1) Northern California, (2) Northern Sacramento Valley, (3) Greater Sacramento, (4) Bay Area, (5) San Joaquin Valley, (7) Central Coast, (8) Southern California I (Los Angeles and Ventura counties), (9) Southern California II (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report. The Central Sierra (Region 6) does not have any nursing education programs and was, therefore, not included in the analyses.

## DATA SUMMARY AND HISTORICAL TREND ANALYSES

This analysis presents pre-licensure program data from the 2007-2008 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates and student and faculty census data.

### Trends in Pre-Licensure Nursing Programs

#### *Number of Nursing Programs*

In 2007-2008, there were 18 nursing programs in the Southern California II Region that led to RN licensure. Of these programs, 12 are ADN programs, four are BSN programs, and two are ELM programs. The majority (83.3%) of pre-licensure nursing programs in the Southern California II region are public.

#### **Number of Nursing Programs**

|                                 | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|---------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                 | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>Total # Nursing Programs</b> | <b>12</b>            | <b>12</b>        | <b>12</b>        | <b>12</b>        | <b>13</b>        | <b>13</b>        | <b>16</b>        | <b>18</b>        |
| <i>ADN Programs</i>             | 10                   | 10               | 10               | 10               | 11               | 11               | 11               | 12               |
| <i>BSN Programs</i>             | 2                    | 2                | 2                | 2                | 2                | 2                | 4                | 4                |
| <i>ELM Programs</i>             |                      |                  |                  |                  |                  |                  | 1                | 2                |
| <i>Public Programs</i>          | 11                   | 11               | 11               | 11               | 12               | 12               | 15               | 15               |
| <i>Private Programs</i>         | 1                    | 1                | 1                | 1                | 1                | 1                | 1                | 3                |

#### *Admission Spaces and New Student Enrollments*

Admission spaces available for new student enrollments increased by 62.9% (n=612) in the past eight years, from 972 spaces in 2000-2001 to 1,584 in 2007-2008. These spaces were filled with a total of 1,724 students, increasing new student enrollment by 82.8% (n=781) from 2000-2001.

Although programs in the region grew dramatically over the eight-year period, the past year shows a slight drop (2.2%) in new student enrollments in comparison to the previous year.

#### **Availability and Utilization of Admission Spaces**

|                         | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|-------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                         | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| Spaces Available        | 972                  | 1,079            | 1,117            | 1,127            | 1,192            | 1,296            | 1,493            | 1,584            |
| New Student Enrollments | 943                  | 1,047            | 1,117            | 1,153            | 1,189            | 1,377            | 1,762            | 1,724            |
| % Spaces Filled         | 97.0%                | 97.0%            | 100.0%           | 102.3%           | 99.7%            | 106.3%           | 118.0%           | 108.8%           |

The number of qualified applications to Southern California II nursing programs increased by 68.2% (n=2,102) in the last year. Due to the disparity in the number of spaces available and the number of qualified applications received, the share of qualified applications not accepted for admission rose from 42.8% in 2006-2007 to 66.7% in 2007-2008.

### Applications Accepted and Not Accepted for Admission

|  | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|--|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>Qualified Applications</b>                | <b>1,630</b>         | <b>1,734</b>     | <b>1,944</b>     | <b>3,226</b>     | <b>3,245</b>     | <b>3,454</b>     | <b>3,080</b>     | <b>5,182</b>     |
| <i>Accepted</i>                              | 943                  | 1,047            | 1,117            | 1,153            | 1,189            | 1,377            | 1,762            | 1,724            |
| <i>Not Accepted</i>                          | 687                  | 687              | 827              | 2,073            | 2,056            | 2,077            | 1,318            | 3,458            |
| <b>% Qualified Applications Not Accepted</b> | <b>42.1%</b>         | <b>39.6%</b>     | <b>42.5%</b>     | <b>64.3%</b>     | <b>63.4%</b>     | <b>60.1%</b>     | <b>42.8%</b>     | <b>66.7%</b>     |

\*\*Since these data represent applications rather than individuals, an increase in qualified applications may not represent equal growth in the number of individuals applying to nursing school.

Although new student enrollments in all types of pre-licensure nursing education programs have increased since 2000-2001, enrollments in ADN, BSN and public programs have decreased for the first time in several years. Despite these changes, the majority of nursing students in the region continue to be educated through public ADN programs.

### New Student Enrollment by Program Type

|                               | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|-------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                               | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>New Student Enrollment</b> | <b>943</b>           | <b>1,047</b>     | <b>1,117</b>     | <b>1,153</b>     | <b>1,189</b>     | <b>1,377</b>     | <b>1,762</b>     | <b>1,724</b>     |
| <i>ADN</i>                    | 729                  | 842              | 905              | 935              | 966              | 1,216            | 1,473            | 1,442            |
| <i>BSN</i>                    | 214                  | 205              | 212              | 218              | 223              | 161              | 289              | 211              |
| <i>ELM</i>                    |                      |                  |                  |                  |                  |                  |                  | 71               |
| <i>Private</i>                |                      |                  |                  |                  |                  |                  |                  | 133              |
| <i>Public</i>                 | 828                  | 930              | 991              | 1,027            | 1,054            | 1,337            | 1,704            | 1,591            |

### Student Completions

The number of students who completed a nursing program in the Southern California II region increased by 57.2% (n=422), from 738 in 2000-2001 to 1,160 in 2007-2008. Of the 1,160 students that completed a nursing program in the Southern California II region in 2007-2008, 91.1% (n=1,057) of them completed an ADN program and 8.9% (n=103) completed a BSN program.

### Student Completions

|                           | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|---------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                           | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>Student Completion</b> | <b>738</b>           | <b>767</b>       | <b>751</b>       | <b>956</b>       | <b>999</b>       | <b>929</b>       | <b>1,022</b>     | <b>1,160</b>     |
| <i>ADN</i>                | 619                  | 638              | 620              | 786              | 862              | 845              | 950              | 1,057            |
| <i>BSN</i>                | 119                  | 129              | 131              | 170              | 137              | 84               | 72               | 103              |
| <i>ELM</i>                |                      |                  |                  |                  |                  |                  | 0                | 0                |

### Retention Rate

Of the 1,168 students scheduled to complete a nursing program in the 2007-2008 academic year, 72.8% (n=850) completed the program on-time, 12.8% (n=149) are still enrolled in the program, and 14.5% (n=169) dropped out or were disqualified from the program. The retention rate has remained around 72% for the past two years.

#### Student Cohort Completion and Retention Data

|                         | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|-------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                         | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>Enrollment</b>       | <b>1,099</b>         | <b>1,211</b>     | <b>1,076</b>     | <b>1,353</b>     | <b>1,272</b>     | <b>1,005</b>     | <b>1,021</b>     | <b>1,168</b>     |
| Completed On Time       | 699                  | 745              | 667              | 970              | 886              | 743              | 737              | 850              |
| Still Enrolled          | 179                  | 279              | 198              | 170              | 130              | 79               | 116              | 149              |
| Attrition               | 221                  | 187              | 211              | 213              | 256              | 183              | 168              | 169              |
| <b>Retention Rate*</b>  | 63.6%                | 61.5%            | 62.0%            | 71.7%            | 69.7%            | 73.9%            | 72.2%            | 72.8%            |
| <b>Attrition Rate</b>   | 20.1%                | 15.4%            | 19.6%            | 15.7%            | 20.1%            | 18.2%            | 16.5%            | 14.5%            |
| <b>% Still Enrolled</b> | 16.3%                | 23.1%            | 18.4%            | 12.6%            | 10.2%            | 7.9%             | 11.3%            | 12.8%            |

\*Retention rate = (students who completed the program on-time) / (enrollment)

Trends in attrition by program type show that BSN programs have lower attrition rates than ADN programs. Attrition rates in all program types have improved since 2000-2001.

#### Attrition Rates by Program Type

| <b>Program Type</b> | <i>Academic Year</i> |                  |                  |                  |                  |                  |                  |                  |
|---------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                     | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| ADN                 | 21.4%                | 14.9%            | 20.4%            | 16.7%            | 21.2%            | 19.5%            | 17.7%            | 15.7%            |
| BSN                 | 12.3%                | 18.8%            | 14.9%            | 9.9%             | 12.7%            | 3.6%             | 0.0%             | 2.7%             |
| ELM                 |                      |                  |                  |                  |                  |                  |                  | **               |
| Private             |                      |                  |                  |                  |                  |                  |                  | **               |
| Public              | 20.8%                | 14.5%            | 20.1%            | 16.5%            | 20.4%            | 18.2%            | 16.5%            | 14.5%            |

\*\*These data were not reported.

There has been fluctuation in the retention and attrition rates over the eight-year period documented in the above tables. There were changes to the survey between 2003-2004 and 2004-2005, and between 2004-2005 and 2005-2006 that may have affected the comparability of these data over time.

### *Student Census Data*

The total number of students enrolled in Southern California II nursing programs increased by 80.5% (n=1,486), from 1,846 on October 15, 2001 to 3,332 on October 15, 2008.

The reported number of pre-nursing students increased from 1,184 in 2007 to 2,536 in 2008. This increase may be due to more programs reporting data than to an actual increase in the number of pre-nursing students.

### **Student Census Data**

| <b>Program Track</b>          | <b>Academic Year</b> |                  |                  |                  |                  |                  |                  |                  |
|-------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                               | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| ADN Program                   | 1,467                | 1,648            | 1,553            | 1,784            | 1,927            | 2,109            | 2,336            | 2,471            |
| BSN Program                   | 379                  | 511              | 599              | 636              | 656              | 341              | 613              | 736              |
| ELM Program                   |                      |                  |                  |                  |                  |                  |                  | 125              |
| <b>Total Nursing Students</b> | <b>1,846</b>         | <b>2,159</b>     | <b>2,152</b>     | <b>2,420</b>     | <b>2,583</b>     | <b>2,450</b>     | <b>3,012</b>     | <b>3,332</b>     |
| Pre-Nursing Students          |                      |                  |                  |                  | 4,322            | 3,004            | 1,184            | 2,536            |

\*Blank cells indicated that the applicable information was not requested in the given year.

### *Clinical Simulation in Nursing Education*

Data show that 62.5% (n=10) of the sixteen nursing schools in the Southern California II region used a clinical simulation center<sup>2</sup> between 8/1/07 and 7/31/08. The majority of schools that use clinical simulation centers reported that they use these facilities to make up for clinical experiences and to check clinical competencies. Data gathered also show that 70.0% of the ten nursing schools that currently use a clinical simulation center have plans to expand it.

| <b>Reasons for Using a Clinical Simulation Center*</b>             | <b>2007-2008</b> |
|--|------------------|
| To standardize clinical experiences                                | 70.0%            |
| To provide clinical experience not available in a clinical setting | 70.0%            |
| To check clinical competencies                                     | 80.0%            |
| To make up for clinical experiences                                | 90.0%            |
| To increase capacity in your nursing program                       | 10.0%            |
| <b>Number of schools that use a clinical simulation center</b>     | <b>10</b>        |

\*These data were collected for the first time in 2006-2007. However, changes in these questions for the 2007-2008 administration of the survey and lack of confidence in the reliability of the 2006-2007 data prevent comparability of the data. Therefore, data from previous years of the survey are not shown.

<sup>2</sup> Clinical Simulation Center/Experience - students have a simulated real-time nursing care experience using hi-fidelity mannequins and clinical scenarios, which allow them to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. The experience includes videotaping, de-briefing and dialogue as part of the learning process.

### *Faculty Census Data*

The total number of nursing faculty in the Southern California II region has increased by 87.1% (n=229) since October 15, 2001. On October 15, 2008, there were 492 total nursing faculty in the Southern California II region. Of these faculty, 41.3% (n=203) were full-time and 58.7% (n=289) were part-time.

Despite an increase in the total number of faculty in the region, the need for faculty remains high. On October 15, 2008, there were 27 vacant faculty positions in the Southern California II region. These vacancies represent a 5.2% faculty vacancy rate, the highest vacancy rate reported in eight years.

#### **Faculty Data**

|                       | <i>Academic Year</i> |                  |                  |                  |                   |                  |                  |                  |
|-----------------------|----------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|
|                       | <i>2000-2001</i>     | <i>2001-2002</i> | <i>2002-2003</i> | <i>2003-2004</i> | <i>2004-2005*</i> | <i>2005-2006</i> | <i>2006-2007</i> | <i>2007-2008</i> |
| <b>Total Faculty</b>  | <b>263</b>           | <b>260</b>       | <b>259</b>       | <b>304</b>       | <b>338</b>        | <b>288</b>       | <b>419</b>       | <b>492</b>       |
| <i>Full-time</i>      | 163                  | 167              | 146              | 171              | 156               | 129              | 196              | 203              |
| <i>Part-time</i>      | 100                  | 93               | 113              | 133              | 127               | 159              | 223              | 289              |
| <b>Vacancy Rate**</b> |                      | <b>4.8%</b>      | <b>2.3%</b>      | <b>0.3%</b>      | <b>2.0%</b>       | <b>3.0%</b>      | <b>3.7%</b>      | <b>5.2%</b>      |
| <i>Vacancies</i>      |                      | 13               | 6                | 1                | 7                 | 9                | 16               | 27               |

In 2004-2005, 2005-2006 and 2006-2007, the sum of full- and part-time faculty did not equal the total faculty reported.

\*Faculty vacancies were estimated based on the vacant FTEs reported.

\*\*Vacancy rate = number of vacancies/(total faculty + number of vacancies)

### *Summary*

The Southern California II region has seen the number of qualified applications to its nursing schools more than triple since 2000-2001. Although there was a slight drop in the number of qualified applications between 2005-2006 and 2006-2007, there was a sharp increase (68.2%) in qualified applications in 2007-2008. Since 2000-2001, the number of admission spaces available increased by 63.0% (n=612) and new student enrollments increased by 82.8% (n=781). Even though nursing programs in the region continue to receive more qualified applications than can be accommodated, new student enrollments in the region decreased for the first time in eight years.

Nursing program expansions have led to a growing number of RN graduates in the region. Between 2000-2001 and 2007-2008, graduations increased 57.2% (n=422) in the Southern California II region. Nursing program retention rates have remained around 72% for the past two years.

Expansion in nursing education has required nursing programs to hire more faculty. As a result, Southern California II RN programs reported that they had 27 faculty vacancies in 2007-2008, representing a 5.2% faculty vacancy rate. Without more faculty, RN programs will not be able to continue their expansion.

## **APPENDIX A – Southern California II Nursing Education Programs**

### **ADN Programs**

Chaffey College  
College of the Desert  
Copper Mountain College  
Cypress College  
Golden West Community College  
Mount San Jacinto College  
Riverside Community College  
Saddleback College  
San Bernardino Valley College  
Santa Ana College  
Victor Valley College  
\* West Coast University – Orange County

### **BSN Programs**

California Baptist University  
CSU Fullerton  
CSU San Bernardino  
University of California Irvine

### **ELM Programs**

\* California Baptist University  
CSU Fullerton

\* New programs in 2007-2008



**APPENDIX B – BRN Education Advisory Committee Members****BRN Education Advisory Committee Members****Members**

Sherry Fox, Chair  
Barbara Whitney  
Deloras Jones  
Jim Comins  
Loucine Huckabay  
Margaret Craig  
Marilyn Herrmann  
Stephanie Leach  
Sue Albert

**Organization**

California State University, Chico  
California Community College Chancellor's Office  
California Institute of Nursing and Health Care  
California Community College Chancellor's Office  
California State University, Long Beach  
Napa Valley College  
Loma Linda University  
California Labor and Workforce Development Agency  
College of the Canyons

**Ex-Officio Members**

Ruth Ann Terry  
Louise Bailey

California Board of Registered Nursing  
California Board of Registered Nursing

**Project Managers**

Carol Mackay  
Julie Campbell-Warnock

California Board of Registered Nursing  
California Board of Registered Nursing